

SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid



PE51271

Configuration

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid
- Bulkhead

Features

- Max. Operating Frequency 18 GHz
- Excellent VSWR of 1.25:1
- Gold over Nickel Plated Beryllium Copper Contact

Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

Description

Pasternack's PE51271 , SMA, Standard, Connector is part of our full line of RF components available for same-day shipping. Our SMA female connector operates up to a maximum frequency of 18 GHz and offers excellent VSWR of 1.25:1. This SMA bulkhead connector allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Our SMA female bulkhead connector PE51271 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.25:1	
Insertion Loss			0.17	dB
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms
Inner Conductor DC Resistance			3	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms
Impedance		50		Ohms

Electrical Specification Notes:
Insertion loss is = 0.04*SQRT(F(GHz)) dB

Mechanical Specifications

Size

- Length 0.433071 in [11 mm]
- Width 0.433071 in [11 mm]
- Height 0.748031 in [19 mm]
- Weight 0.015 lbs [6.8 g]

SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid



PE51271

Mating Cycles	100 Cycles
Mating Torque	4 to 5.3 in-lbs [[0.45 to 0.60 Nm]]
Cable Retention Force	6.1 lbs [2.77 kg]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel
Insulation	Teflon	
Body	Brass	Gold over Nickel
Coupling Nut	Brass	Gold over Nickel
Gasket	Silicone	
Washer	Brass	Gold over Nickel

Environmental Specifications

Temperature	
Operating Range	-40 to +165 deg C
Thermal Shock	MIL-STD-202, Method 107, Condition B

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

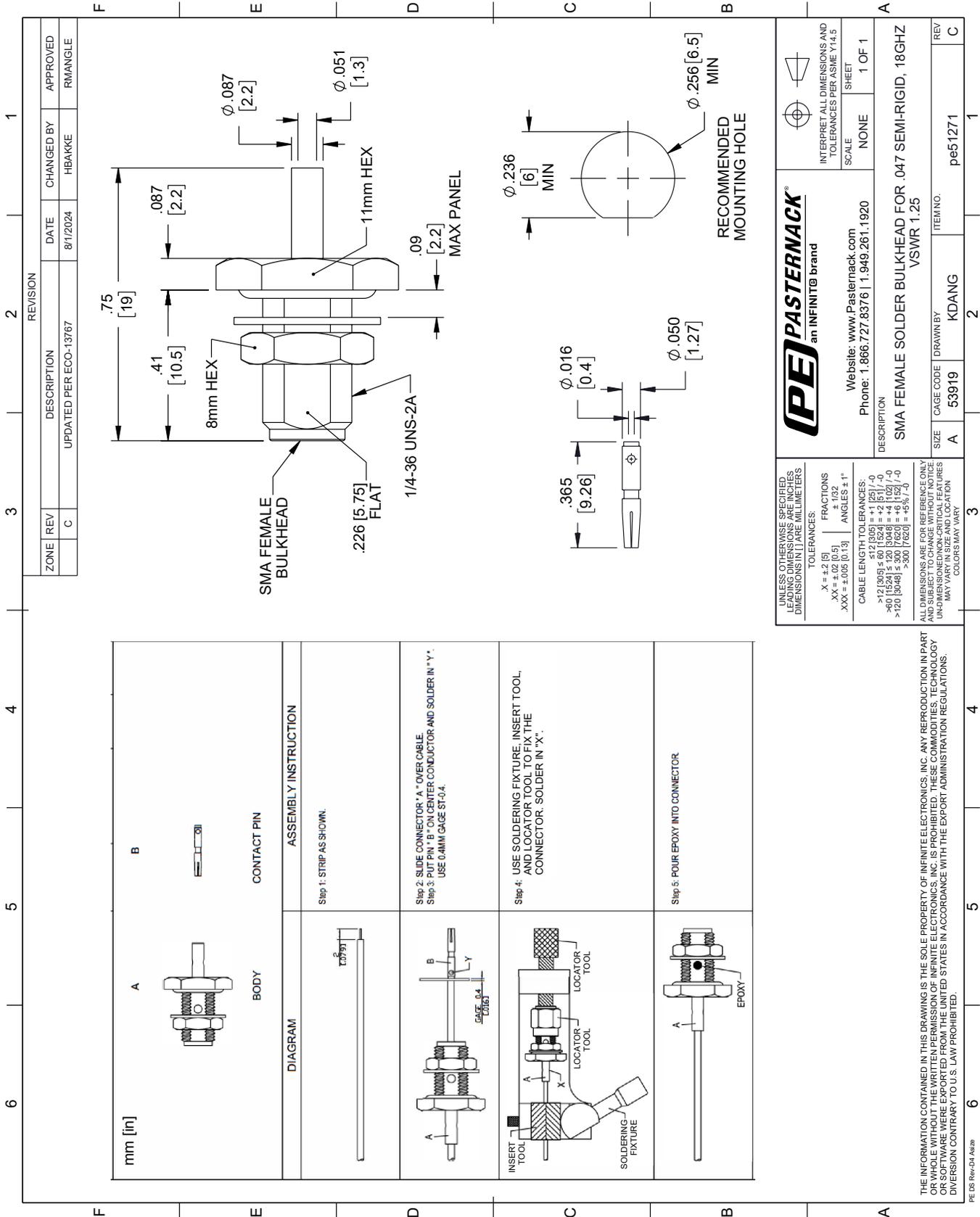
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid PE51271](#)

URL: <https://www.pasternack.com/sma-female-pe-047sr-pe-p047-pe-sr047al-connector-pe51271-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE51271 CAD Drawing

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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

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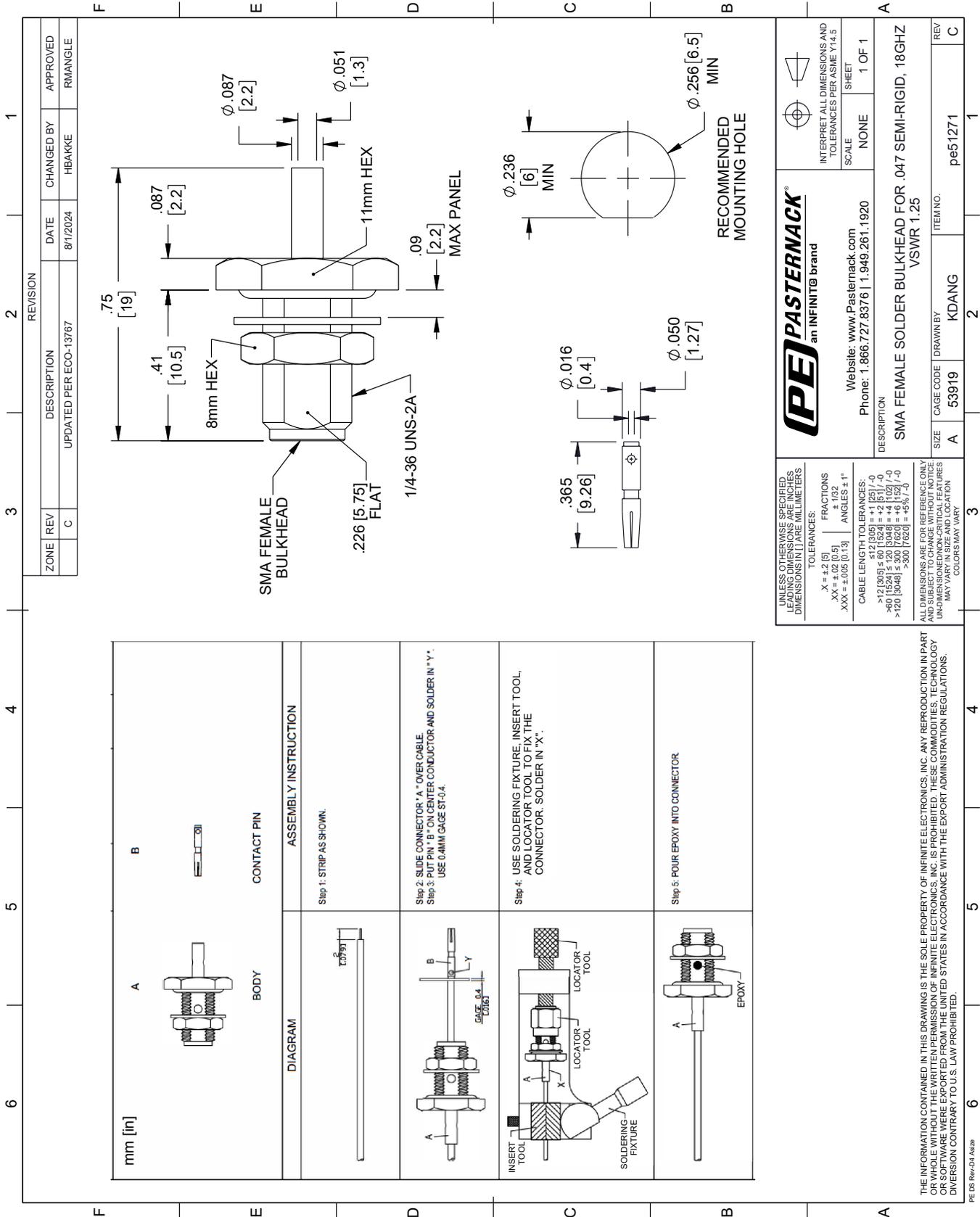
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URL: <https://www.pasternack.com/sma-female-pe-047sr-pe-p047-pe-sr047al-connector-pe51271-p.aspx>

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PE51271 CAD Drawing

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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	C	UPDATED PER ECO-13767	8/1/2024	HBAKKE	RMANGLE

PE PASTERNAK
an INFINITE brand

Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: SMA FEMALE SOLDER BULKHEAD FOR .047 SEMI-RIGID, 18GHZ VSWR 1.25

SIZE: A
CAGE CODE: 53919
DRAWN BY: KDANG
ITEM NO.: pe51271

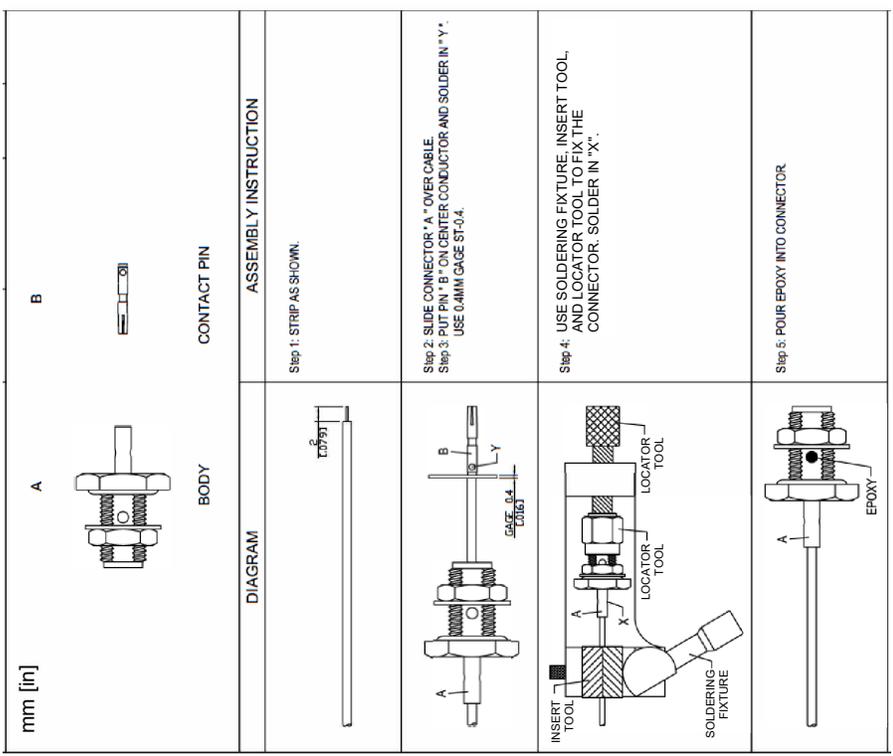
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS: ± 1/32
 ANGLES: ± 1°

CABLE LENGTH TOLERANCES:
 ≤ 12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0
 > 12 [305] ≤ 60 [1524] = +.2 [5] / -0
 > 60 [1524] ≤ 120 [3048] = +.4 [10] / -0
 > 120 [3048] ≤ 300 [7620] = +.8 [20] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/UNCLEAR CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.



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Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables Technical Data Sheet

PE-SR047FL

Configuration

- Formable Cable
- 1 Shield(s)

Features

- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- May be formed by hand and does not require special tools to bend
- May be formed more than once without damaging the outer conductor
- Tinned Copper Braid Outer Conductor
- Max Frequency 20 GHz

Applications

- Test and Measurement
- Communication Systems
- Wireless Systems
- Medical Equipment
- RADAR
- Low Loss Applications

Description

Formable semi-rigid coaxial cable is a hand formable version of standard semi-rigid that does not require complicated and costly preformed cable assemblies. Because the dimensions and electrical characteristics are so closely matched to semi-rigid coax, standard semi-rigid connectors can be used. Pasternack's PE-SR047FL is a formable .047 semi-rigid coax cable with tinned copper braid outer conductor, providing low loss and excellent RF shielding effectiveness. This semi-flexible cable has an FEP jacket to reduce the chance of shorting exposed contacts or circuit conductors. Pasternack's formable cable can be used as an alternative to semi-rigid coaxial cable in applications where flexibility is required without giving up high electrical performance level. PE-SR047FL datasheet specifications and outline drawing for this .047 semi-flexible hand formable cable are shown in the PDF below.

Pasternack carries a wide range of cables ready to ship same day to fit your needs. They are available in corrugated, flexible, formable or semi-rigid versions with different constructions of conductor materials, dielectric materials, shielding configurations and jacket materials. Our cables are designed to fit a wide range of performance criteria including attenuation, operating temperature, environmental factor, and power capability.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		20	GHz
Impedance		50		Ohms
Velocity of Propagation		69.5		%
Inner Conductor DC Resistance			207	Ohms/1000ft
Outer Conductor DC Resistance			8	Ohms/1000ft
Nominal Capacitance		32 [104.99]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR047FL](#)



Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables Technical Data Sheet

PE-SR047FL

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	3	5	10	GHz
Attenuation, Typ	25	36	65	86	128	dB/100ft
	82.02	118.11	213.25	282.15	419.95	dB/100m

Description	F6	F7	F8	F9	F10	Units
Frequency	15	20				GHz
Attenuation, Typ	162	192				dB/100ft
	531.5	629.92				dB/100m

Mechanical Specifications

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver1	0.011 in 0.28 mm
Conductor Type	Solid	
Dielectric	PTFE	0.034 in 0.86 mm
Outer Conductor	Tinned Copper Braid	0.047 in 1.19 mm

Environmental Specifications

Temperature

Operating Range -40 to +100 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR047FL](#)

Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables Technical Data Sheet

PE-SR047FL

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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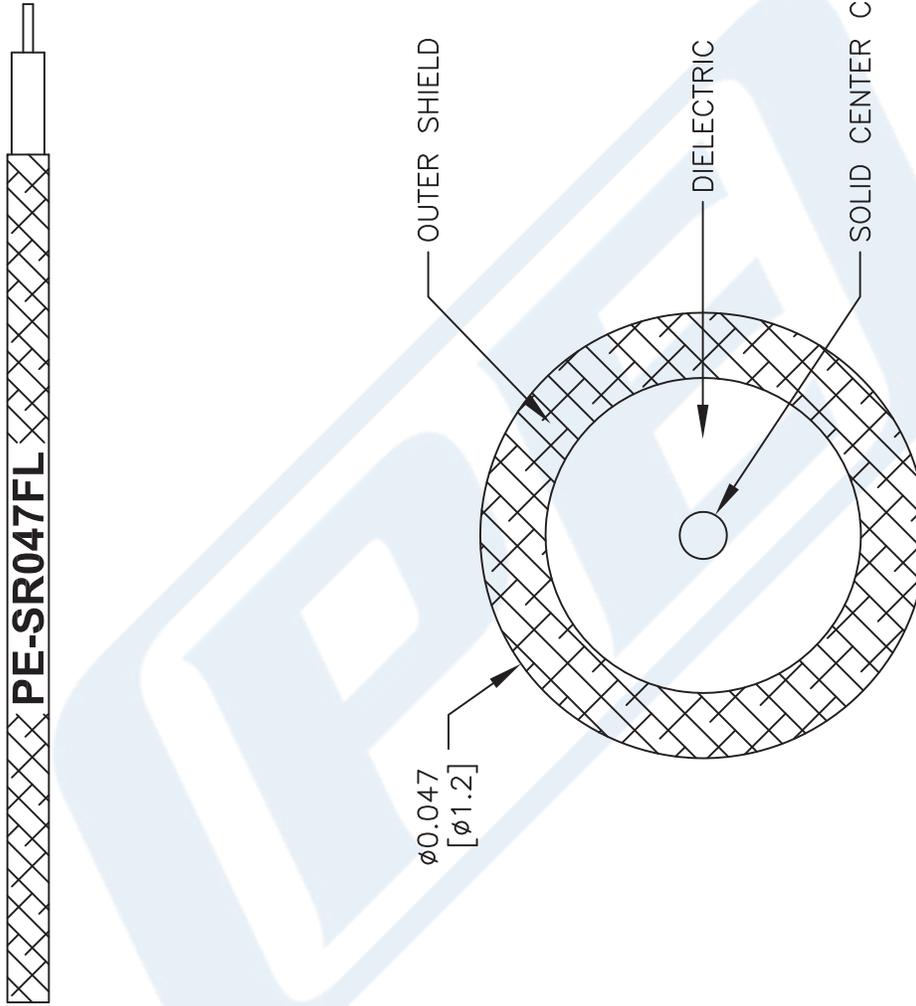
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URL: <https://www.pasternack.com/formable-0.047-semirigid-replacement-50-ohm-coax-cable-tinned-braid-pe-sr047fl-p.aspx>

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PE-SR047FL CAD Drawing

Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor



NOTES:
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE
PE-SR047FL

41742

SIZE A

SCALE N/A

CAD FILE 111716

FSCM NO. 53919



PASTERNAK
 THE ENGINEER'S RF SOURCE
 Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
 Phone: (949) 261-1920 | Fax: (949) 261-7451
 Website: www.pasternack.com | E-Mail: sales@pasternack.com